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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,124

07/12/2006

Christian Pays

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6473

23718

7590

04/28/2008

SCHLUMBERGER OILFIELD SERVICES

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EXAMINER

UPTON, CHRISTOPHER

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

04/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,124	PAYS ET AL.	
	Examiner	Art Unit	
	Christopher Upton	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over German publication 296 16 832 or Kunz, each in view of Frumm, UK patent 1,418,806 or PCT publication WO 02/20115.

Kunz and the German publication each disclose an oil/water separator having a coalescer followed by a guiding means for the separated droplets which allows the water to flow through, substantially as claimed. The instant claims differ in recitation of the coalescer being a reusable polymer absorbent material instead of the metal turnings of Kunz or the unspecified material of the German reference. It is well known to use a polymer absorbent material, such as a foam, as a coalescer, as exemplified by Frumm, the British patent and the PCT publication. It would therefore have been obvious for one skilled in the art to use such a polymer absorbent as a coalescer in the devices of Kunz and the German publication, as a substitution of one known suitable material for another. With respect to claim 3, it is submitted that the distance would have been an obvious matter of optimization for one skilled in the art, depending on the characteristics of the oil, the flow rate, and other considerations, and therefore fails to patentably distinguish over the prior art.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 7 above, and further in view of Kingsbury or Lawson.

Claim 8 differs from claim 7 in recitation of repeating the steps. It is well known to provide plural serial separation stages in a coalescing separator, as exemplified by Kingsbury and Lawson. It would therefore have been obvious for one skilled in the art to adapt the device of claim 7 to use plural stages, depending on the desired final quality, the characteristics of the oil, and other factors.

4. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Applicant's arguments filed on February 21, 2008 have been fully considered but they are not persuasive.

Applicant argues that it is improper to substitute the polymer absorbent material of the instant claims for the metal turnings or the unspecified material of the German reference. It is submitted, that since the function of a coalescer is to coalesce oil, any suitable known material which performs that function may obviously be substituted for any other known material, and therefore fails to patentably distinguish over the prior art, absent a declaration showing unexpected results. In particular, since the German reference does not specify a material for the coalescer, it is submitted that one of ordinary skill in the art would select from known materials, based on the characteristics of the liquids to be separated and other factors.

Applicant further argues that large drops are detached from the coalescer by the flow velocity. With respect to apparatus claim 1, it is submitted that this is functional language which fails to limit the structure claimed. It is further submitted that this function is inherent to the function of a coalescer, since the purpose of a coalescer is to form larger, more easily separatable drops from smaller droplets. Such larger drops must be detached from the coalescer to be removed from the liquid. Furthermore, if the larger drops are not detached, the coalescer would become clogged and cease to function.

Applicant further argues that claim 7 recites a guiding step. It is submitted that this function is performed by plates 5 of Kunz and the channels 4 of the German publication.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Upton whose telephone number is 571-272-1169. The examiner can normally be reached on 8:30-6:00, off every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Upton/
Primary Examiner, Art Unit 1797

Christopher Upton
Primary Examiner
Art Unit 1797